



INFORMATION DISCLOSURE  
CITATION IN AN  
APPLICATION  
(PTO-1449)

ATTY. DOCKET NO.  
004066 USA  
D01/Consilium/Consilium

SERIAL NO.  
10/084,092

RECEIVED

OCT 10 2003

APPLICANT  
John F. ARACKAPARAMBIL et al.

Technology Center 2100

FILING DATE  
February 28, 2002

GROUP  
2121

U.S. PATENT DOCUMENTS

EXAMINER'S INITIALS	PATENT NO.	DATE	NAME	CLASS	SUBCLASS	FILING DATE
SRG	5,901,313	05/04/99	Wolf et al.			09/02/97
SRG	6,002,989	12/14/99	Shiba et al.			04/01/97
SRG	6,094,688	07/25/00	Mellen-Garnett et al.			03/12/98
SRG	6,340,602	01/22/02	Johnson et al.			02/12/01
SRG	6,345,288	02/05/02	Reed et al.			05/15/00
SRG	6,368,879	04/09/02	Toprac			09/22/99
SRG	US-2002/0107604	08/08/02	Riley et al.			12/06/00
SRG	6,470,230	10/22/02	Toprac et al.			01/04/00
SRG	6,482,660	11/19/02	Conchieri et al.			03/19/01
SRG	6,567,717	05/20/03	Krivokapic et al.			01/19/00

FOREIGN PATENT DOCUMENTS

EXAMINER'S INITIALS	PATENT NO.	DATE	COUNTRY	CLASS	SUBCLASS	Translation	
						Yes	No
SRG	WO 99/59200	11/18/99	WIPO			X	
SRG	WO 01/52319	07/19/01	WIPO			X	

OTHER ART (Including Author, Title, Date, Pertinent Pages, Etc.)

SRG	Williams, Randy, Dadi Gudmundsson, Kevin Monahan, Raman Nurani, Meryl Stoller and J. George Shanthikumar. October 1999. "Optimized Sample Planning for Wafer Defect Inspection," <i>Semiconductor Manufacturing Conference Proceedings, 1999 IEEE International Symposium on Santa Clara, CA</i> . Piscataway, NJ. pp. 43 - 46.
SRG	23 July 2003. Invitation to Pay Additional Fees and Communication Relating to the Results of the Partial International Search for PCT/US02/19116.
SRG	01 August 2003. Written Opinion for PCT/US01/27406.
SRG	20 August 2003. Written Opinion for PCT/US01/22833.

EXAMINER /Steven Garland/	DATE CONSIDERED 06/22/2006
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PTO/SB/08a/b (07-05)

Approved for use through 07/31/2006. OMB 0651-0031

U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE

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<b>Substitute for form 1449A/B/PTO</b>  <b>INFORMATION DISCLOSURE STATEMENT BY APPLICANT</b>  (Use as many sheets as necessary)				<b>Complete If Known</b>	
				Application Number	10/084,092
				Filing Date	February 28, 2002
				First Named Inventor	Arackaparambil et al.
				Art Unit	2125
				Examiner Name	Steven Garland
Sheet	1	of	1	Attorney Docket Number	4066 USA D1/Consilium/Consilium

U.S. PATENT DOCUMENTS					
Examiner Initials*	Cite No. <sup>1</sup>	Document Number	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		Number-Kind Code <sup>2</sup> (if known)			

FOREIGN PATENT DOCUMENTS						
Examiner Initials*	Cite No. <sup>1</sup>	Foreign Patent Document	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	T <sup>3</sup>
		Country Code <sup>3</sup> -Number <sup>4</sup> -Kind Code <sup>5</sup> (if known)				

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NON PATENT LITERATURE DOCUMENTS			
Examiner Initials	Cite No. <sup>1</sup>	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T <sup>2</sup>
SRG		"NanoMapper wafer nanotopography measurement by ADE Phase Shift." <a href="http://www.phase-shift.com/nanomap.shtml">http://www.phase-shift.com/nanomap.shtml</a> . December 9, 2003.	
SRG		"Wafer flatness measurement of advanced wafers." <a href="http://www.phase-shift.com/wafer-flatness.shtml">http://www.phase-shift.com/wafer-flatness.shtml</a> . December 9, 2003.	
SRG		"ADE Technologies, Inc. - 6360." <a href="http://www.adetech.com/6360.shtml">http://www.adetech.com/6360.shtml</a> . December 9, 2003.	
SRG		"3D optical profilometer MicroXAM by ADE Phase Shift." <a href="http://www.phase-shift.com/microxam.shtml">http://www.phase-shift.com/microxam.shtml</a> . December 9, 2003.	
SRG		"NanoMapper FA factory automation wafer nanotopography measurement." <a href="http://www.phase-shift.com/nanomapperfa.shtml">http://www.phase-shift.com/nanomapperfa.shtml</a> . December 9, 2003.	

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Examiner Signature	/Steven Garland/	Date Considered	06/22/2006
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**U.S. PATENT DOCUMENTS**

EXAMINER'S INITIALS	PATENT NO.	DATE	NAME	CLASS	SUBCLASS	FILING DATE
SRG	3,205,485	09/07/65	Noltingk			10/21/60
	3,229,198	01/11/66	Libby			09/28/62
	4,000,458	12/28/76	Miller et al.			08/21/75
	4,302,721	11/24/81	Urbanek et al.			05/15/79
	4,750,141	06/07/88	Judell et al.			11/26/85
	4,757,259	07/12/88	Charpentier			11/05/86
	4,938,600	07/03/90	Into			02/09/89
	5,283,141	02/01/94	Yoon et al.			03/05/92
	5,338,630	08/16/94	Yoon et al.			11/18/93
	5,485,082	01/16/96	Wisspeintner et al.			04/05/90
	5,497,381	03/05/96	O'Donoghue et al.			06/01/95
	5,511,005	04/23/96	Abbe et al.			02/16/94
	5,519,605	05/21/96	Cawfield			10/24/94
	5,526,293	06/11/96	Mozumder et al.			12/17/93
	5,541,510	06/30/96	Danielson			04/06/95
	5,546,312	08/13/96	Mozumder et al.			02/24/94
	5,553,195	09/03/96	Meijer			09/29/94
	5,602,492	02/11/97	Cresswell et al.			04/28/94
	5,617,023	04/01/97	Skalski			02/02/95
	5,627,083	05/06/97	Tounai			05/12/95
	5,642,296	06/24/97	Saxena			07/29/93
	5,646,870	07/08/97	Krivokapic et al.			02/13/95
	5,649,169	07/15/97	Berezin et al.			06/20/95
	5,654,903	08/05/97	Reitman et al.			11/07/95
	5,663,797	09/02/97	Sandhu			05/16/96
✓	5,665,199	09/09/97	Sahota et al.			06/23/95
SRG	5,666,297	09/09/97	Britt et al.			05/13/94

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SRG	5,667,424	09/16/97	Pan			09/25/96
	5,674,787	10/07/97	Zhao et al.			01/16/96
	5,719,796	02/17/98	Chen			12/04/95
	5,735,055	04/07/98	Hochbein et al.			04/23/96
	5,761,064	06/02/98	La et al.			10/06/95
	5,777,901	07/07/98	Berezin et al.			09/29/95
	5,787,021	07/28/98	Samaha			12/18/95
	5,787,269	07/28/98	Hyodo			09/19/95
	5,825,913	10/20/98	Rostami et al.			07/18/95
	5,857,258	01/12/99	Penzes et al.			05/12/94
	5,910,846	06/08/99	Sandhu			08/19/97
	5,943,237	08/24/99	Van Boxem			10/17/97
	5,960,185	09/28/99	Nguyen			06/24/96
	5,961,369	10/05/99	Bartels et al.			06/04/98
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	6,036,349	03/14/00	Gombar			07/26/96
	6,064,759	05/16/00	Buckley et al.			11/06/97
	6,072,313	06/06/00	Li et al.			06/17/97
	6,097,887	08/01/00	Hardikar et al.			10/27/97
	6,108,092	08/22/00	Sandhu			06/08/99
	6,127,263	10/03/00	Parikh			07/10/98
	6,136,163	10/24/00	Cheung et al.			03/05/99
	6,141,660	10/31/00	Bach et al.			07/16/98
✓	6,143,646	11/07/00	Wetzel			06/03/97
	6,148,099	11/14/00	Lee et al.			07/03/97
SRG	6,148,239	11/14/00	Funk et al.			12/12/97

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SRG	6,159,075	12/12/00	Zhang			10/13/99
	6,159,644	12/12/00	Satoh et al.			03/06/96
	6,161,054	12/12/00	Rosenthal et al.			09/17/98
	6,169,931	01/02/01	Runnels			06/29/98
	6,172,756	01/09/01	Chalmers et al.			12/11/98
	6,173,240	01/09/01	Sepulveda et al.			11/02/98
	6,191,864	02/20/01	Sandhu			02/29/00
	6,204,165	03/20/01	Ghoshal			06/24/99
	6,210,983	04/03/01	Atchison et al.			06/15/99
	6,214,734	04/10/01	Bothra et al.			11/20/98
	6,217,412	04/17/01	Campbell et al.			08/11/99
	6,222,936	04/24/01	Phan et al.			09/13/99
	2001/0001755	05/24/01	Sandhu et al.			12/29/00
	2001/0003084	06/07/01	Finarov			12/04/00
	6,246,972	06/12/01	Klimasauskas			05/27/99
	6,276,989	08/21/01	Campbell et al.			08/11/99
	6,280,289	08/28/01	Wiswesser et al.			11/02/98
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	6,287,879	09/11/01	Gonzales et al.			08/11/99
	6,290,572	09/18/01	Hofmann			03/23/00
	6,304,999	10/16/01	Toprac et al.			10/23/00
	2001/0030366	10/18/01	Nakano et al.			03/07/01
	6,307,628	10/23/01	Lu et al.			08/18/00
	6,314,379	11/06/01	Hu et al.			12/04/97
✓	2001/0039462	11/08/01	Mendez et al.			04/02/01
SRG	6,320,655	11/20/01	Matsushita et al.			03/15/00
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EXAMINER'S INITIALS	PATENT NO.	DATE	NAME	CLASS	SUBCLASS	FILING DATE
SRG	2001/0042690	11/22/01	Talieh			12/14/00
	6,324,481	11/27/01	Atchison et al.			06/15/99
	6,334,807	01/01/02	Lebel et al.			04/30/99
	6,336,841	01/08/02	Chang			03/29/01
	2002/0032499	03/14/02	Wilson et al.			05/04/01
	6,360,133	03/19/02	Campbell et al.			06/17/99
	6,360,184	03/19/02	Jacquez			03/26/97
	6,368,883	04/09/02	Bode et al.			08/10/99
	6,368,884	04/09/02	Goodwin et al.			04/13/00
	6,379,980	04/30/02	Toprac			07/26/00
	6,388,253	05/14/02	Su			11/02/00
	2002/0058460	05/16/02	Lee et al.			09/14/01
	6,395,152	05/28/02	Wang			07/02/99
	6,397,114	05/28/02	Eryurek et al.			05/03/99
	6,405,096	06/11/02	Toprac et al.			08/10/99
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	2002/0070126	06/13/02	Sato et al.			09/19/01
	2002/0081951	06/27/02	Boyd et al.			02/20/02
	2002/0089676	07/11/02	Pecen et al.			04/26/00
	2002/0102853	08/01/02	Li et al.			12/20/01
	2002/0107599	08/08/02	Patel et al.			01/25/01
	6,435,952	08/20/02	Boyd et al.			06/30/00
	6,438,438	08/20/02	Takagi et al.			01/02/98
	2002/0113039	08/22/02	Mok et al.			02/16/01
	6,440,295	08/27/02	Wang			02/04/00
	2002/0127950	09/12/02	Hirose et al.			03/08/01
SRG	6,455,937	09/24/02	Cunningham			03/17/99

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EXAMINER'S INITIALS	PATENT NO.	DATE	NAME	CLASS	SUBCLASS	FILING DATE
SRG	2002/0149359	10/17/02	Crouzen et al.			08/18/01
↓	6,479,902	11/12/02	Lopatin et al.			06/29/00
	6,479,990	11/12/02	Mednikov et al.			06/18/01
	2002/0185658	12/12/02	Inoue et al.			06/14/01
	2002/0193902	12/19/02	Shanmugasundram et al.			06/18/02
	2002/0197745	12/26/02	Shanmugasundram et al.			08/31/01
	2002/0197934	12/26/02	Paik			11/30/01
	2002/0199082	12/26/02	Shanmugasundram et al.			06/18/02
	6,503,839	01/07/03	Gonzales et al.			07/03/01
↓	2003/0020909	01/30/03	Adams et al.			04/09/01
	2003/0020928	01/30/03	Ritzdorf et al.			07/09/01
SRG	6,517,413	02/11/03	Hu et al.			10/25/00

**FOREIGN PATENT DOCUMENTS**

EXAMINER'S INITIALS	PATENT NO.	DATE	COUNTRY	CLASS	SUBCLASS	Translation	
						Yes	No
SRG	61-66104	04/04/86	Japan			X	
↓	3-202710	09/04/91	Japan			X	
	8-23166	01/23/96	Japan			X	
	9-246547	09/19/97	Japan			X	
	WO 98/05066	02/05/98	WIPO			X	
	10-34522	02/10/98	Japan			X	
	0 869 652	10/07/98	Europe			X	
	WO 99/09371	02/25/99	WIPO			X	
	0 910 123	04/21/99	Europe			X	
↓	0 932 194	07/28/99	Europe			X	
	WO 00/00874	01/06/00	WIPO			X	
SRG	2000-183001	06/30/00	Japan			X	

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SRG	1 071 128	01/24/01	Europe			X	
	WO 01/18623	03/15/01	WIPO			X	
	WO 01/25865	04/12/01	WIPO			X	
	434103	05/16/01	Taiwan			X	
	436383	05/28/01	Taiwan			X	
	455938	09/21/01	Taiwan			X	
	455976	09/21/01	Taiwan			X	
	2001-284299	10/12/01	Japan			X	
	2001-305108	10/31/01	Japan			X	
↓	2002-9030	01/11/02	Japan			X	
	WO 02/074491	09/26/02	WIPO			X	
SRG	2002-343754	11/29/02	Japan			X	

**OTHER ART (Including Author, Title, Date, Pertinent Pages, Etc.)**

SRG	Ostanin, Yu.Ya. October 1981. "Optimization of Thickness Inspection of Electrically Conductive Single-Layer Coatings with Laid-on Eddy-Current Transducers (Abstract)." <i>Defektoskopiya</i> , vol. 17, no. 10, pp. 45-52. Moscow, USSR.
	February 1984. "Substrate Screening Process." <i>IBM Technical Disclosure Bulletin</i> , pp. 4824-4825.
	Herrmann, D. 1988. "Temperature Errors and Ways of Elimination for Contactless Measurement of Shaft Vibrations (Abstract)." <i>Technisches Messen</i> <sup>TM</sup> , vol. 55, no. 1, pp. 27-30. West Germany.
	Lin, Kuang-Kuo and Costas J. Spanos. November 1990. "Statistical Equipment Modeling for VLSI Manufacturing: An Application for LPCVD." <i>IEEE Transactions on Semiconductor Manufacturing</i> , v. 3, n. 4, pp. 216-229.
	Chang, Norman H. and Costas J. Spanos. February 1991. "Continuous Equipment Diagnosis Using Evidence Integration: An LPCVD Application." <i>IEEE Transactions on Semiconductor Manufacturing</i> , v. 4, n. 1, pp. 43-51.
↓	Larrabee, G. B. May 1991. "The Intelligent Microelectronics Factory of the Future (Abstract)." <i>IEEE/SEMI International Semiconductor Manufacturing Science Symposium</i> , pp. 30-34. Burlingame, CA.
SRG	Burke, Peter A. June 1991. "Semi-Empirical Modelling of SiO <sub>2</sub> Chemical-Mechanical Polishing Planarization." <i>VMIC Conference, 1991 IEEE</i> , pp. 379-384. IEEE.

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SRG	May 1992. "Laser Ablation Endpoint Detector." <i>IBM Technical Disclosure Bulletin</i> , pp. 333-334.		
	Spanos, Costas J., Hai-Fang Guo, Alan Miller, and Joanne Levine-Parrill. November 1992. "Real-Time Statistical Process Control Using Tool Data." <i>IEEE Transactions on Semiconductor Manufacturing</i> , v. 5, n. 4, pp. 308-318.		
	February 1993. "Electroless Plating Scheme to Hermetically Seal Copper Features." <i>IBM Technical Disclosure Bulletin</i> , pp. 405-406.		
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		<b>APPLICANT</b> John F. ARACKAPARAMBIL et al.	
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